

CONFIDENTIAL

NOT FOR PUBLIC RELEASE

RECOMMENDATION

Based on information contained in the site file and additional information collected, the following conclusions were drawn. There is an observed release of both uranium-238 (660 - 50,000 pCi/g) and radium-226 (590 - 40,000 pCi/g) to the soils located on Parcel 1 of the site. The mechanism driving the site score is the suspected release of contaminants to surface water based upon the proximity of the site to the Kill Van Kull, a New Jersey State classified water body. The Kill Van Kull is classified as an area for the protection and maintenance of aquatic life. It would be difficult through environmental sampling to document and attribute a release of contaminants from the Staten Island Warehouse into the Kill Van Kull due to the diluting nature of coastal tidal waters. Even if a release was documented, there are no applicable benchmarks for radiological contaminants in the environmental portion of the surface water pathway in SCDMs, making the possibility of a Level I or II release nonexistent. Although it is applicable to score 300 target points on the PA scoresheets for a suspected release to the classified water body, an SI evaluation contains dilution rate and potential contamination factors that would reduce the target points for the Kill Van Kull classification to 0.0005. Furthermore, documentation of any fisheries located within the contamination boundary of the release must be acquired. The Kill Van Kull may be used for recreational fishing, but it is unknown if any fish are caught and consumed from within the contamination boundary of the release. The NJDEPE has advised limited consumption of bluefish, white catfish and white perch obtained from the Kill Van Kull, as well as the entire Newark Bay Complex. No radiological contaminant currently has a bioaccumulation factor equal to or greater than 500 on SCDMs which indicates that it would not be possible to establish actual contamination of a fishery based on those contaminants. If attributable radiological contaminants are found in the Kill Van Kull and an actual fishery is located within the contamination boundary of release, the maximum target points associated with the fishery would drop from a 210 on the PA scoresheets to a 20 on SI scoresheets. There is a potential for groundwater contamination due to the minimal depth to the groundwater table and the possible presence of permeable stratified sand and gravel bodies in the less permeable ground-moraine clayey till deposits which underlie the site. Groundwater is not used as a potable water source and there are no wellhead protection areas within four miles of the site. There is no suspected release of contaminants to the air pathway at the site. Finally, there are no schools, day care facilities or residences within 200 feet of an area of observed contamination. The above information supports a recommendation of DEFERRAL TO THE NUCLEAR REGULATORY COMMISSION for the Staten Island Warehouse Site.

J:\8003105\recommen

317220

